

WELCOME !



**Interstate 90 (I-90)
Improvements Study**
From I-190 to IL Route 43 (Harlem Avenue)

Project Working Group Meeting #2

**Roden Library
September 6, 2013**



Welcome to the second Project Working Group meeting for the I-90 Improvements Study



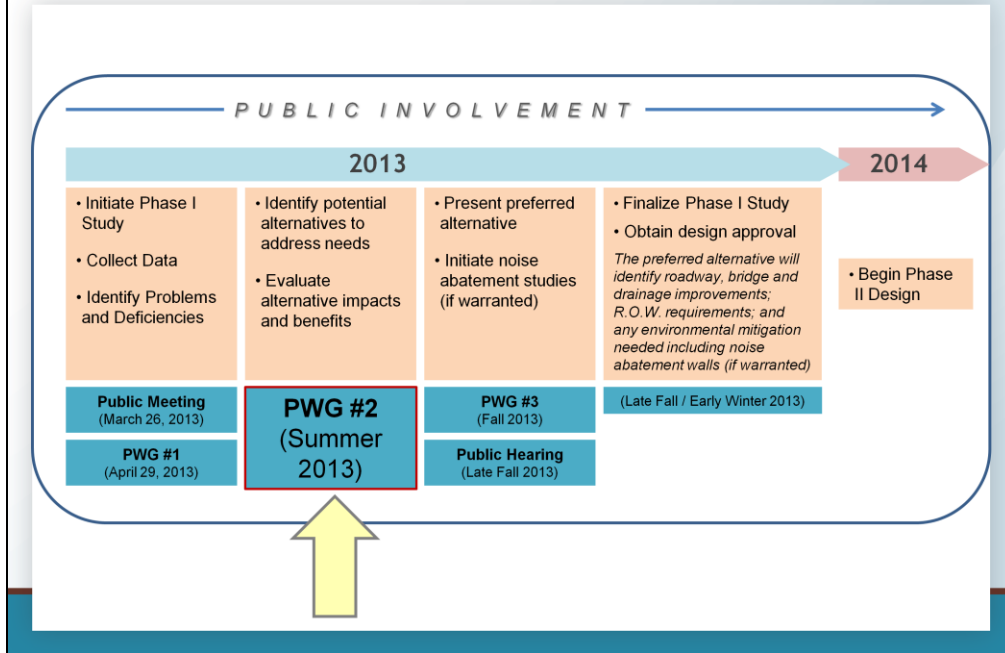
- Review PWG#1
- Purpose & Need
- Discuss evaluation criteria
- Preview potential improvements
- Evaluate potential improvements



Before we get started, let's all introduce ourselves. [Name, affiliation, PSG or PWG]

At today's meeting, we will recap the first PWG meeting and how we've addressed your comments. Then we will look at the Purpose & Need of the project and discuss evaluation criteria. Next we will preview and evaluate the potential alternatives for improvement.

Public Involvement Schedule



This is the second PWG meeting. Previous to today's meeting, we held the first PWG meeting and the Public Meeting.

- Held on April 29, 2013
- Ten attendees
- Discussed:
 - Issues & Concerns
 - Goals & Objectives
 - Problem Statement

Final Problem Statement:

Interstate 90 (I-90) is an important transportation corridor in the Chicago region. The portion of the corridor between I-190 and Harlem Avenue (IL 43) serves as a transition area between the Jane Addams Memorial Tollway and the Kennedy Expressway. This section of I-90 experiences major traffic congestion, and contributes to environmental concerns for the surrounding communities such as traffic noise, air quality and drainage issues. Safety is also a concern due to the high crash rates in some areas. These issues make it difficult for local and regional traffic to move within and through the study area.

The first PWG meeting was held at the end of April, and many of you attended. At that meeting, we discussed Issues & Concerns, Goals & Objectives and the Problem Statement for the project. An active discussion took place regarding elements to add or remove from each of these project milestones. The final problem statement, showing additions based on PWG discussion in red, is shown on the screen.

Comments:	Action(s) Taken:
Concerns of pedestrians crossing WB Harlem entrance ramp; operation of Harlem Avenue ramps and intersections	<ul style="list-style-type: none"> Existing traffic and signal data analyzed Fence was installed along bus station, but residents report that pedestrians still cross ramp Bryn Mawr intersection recommendations: <ul style="list-style-type: none"> Other physical barriers Improve / widen crosswalk markings and pedestrian island SB right turn restrictions / signing Corner radius reduction Higgins intersection recommendations: <ul style="list-style-type: none"> Corner radius reductions Improve crosswalk orientation, markings across loop entrance ramp Better signage for pedestrians, motorists
Construction noise, delays, access during construction	<ul style="list-style-type: none"> Traffic Management Plan will be developed when preferred alternative is determined

There were some specific concerns and questions that were brought up at the first PWG meeting. Here is how we've addressed these comments and concerns.

Discuss each comment.

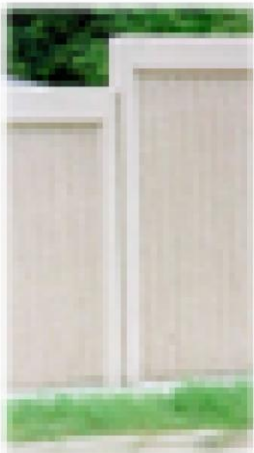
Comments:	Action(s) Taken:
Drainage concerns	<ul style="list-style-type: none"> • Drainage study is underway
Concerns that additional lane will cause traffic to use frontage roads to bypass congestion on I-90 and enter when the additional lane starts	<ul style="list-style-type: none"> • The regional traffic model shows slight increase on: <ul style="list-style-type: none"> • Harlem north of Bryn Mawr • Higgins east and west of Harlem • Will monitor for potential follow-up study to determine if this issue occurs
Concerns about noise impacts	<ul style="list-style-type: none"> • Noise study is underway • Study analyzes existing and proposed traffic conditions • Field measurements taken this summer

There were some specific concerns and questions that were brought up at the first PWG meeting. Here is how we've addressed these comments and concerns.

Discuss each comment.

Noise Abatement Measures

are being evaluated as part of our study.

**Completed Steps:**

- Collected measurements of existing noise levels

Next Steps:

- Model predicted noise levels once preferred improvement plan is identified
- Determine where noise abatement measures may be warranted
- Consider feasibility and reasonableness of abatement measures for inclusion in the project

As mentioned in the previous slide, a noise study is underway. So far, we've collected measurements of existing noise levels. The next steps are to model the predicted noise levels once the preferred improvements are identified, then determine where noise abatement measures may be warranted. Finally, the study will conclude with an analysis to determine whether abatement measures are feasible and reasonable. If so, they will be included in the project.

PURPOSE & NEED

The purpose of the project is to improve traffic operations and safety along I-90 from Interstate 190 (I-190) to Harlem Avenue (Illinois Route 43) in Cook County, Illinois. This will be accomplished by enhancing safety for the motoring public, upgrading the facility to work more efficiently with the surrounding transportation network, and improving regional and local traffic flow and level of service on the mainline and at interchanges.

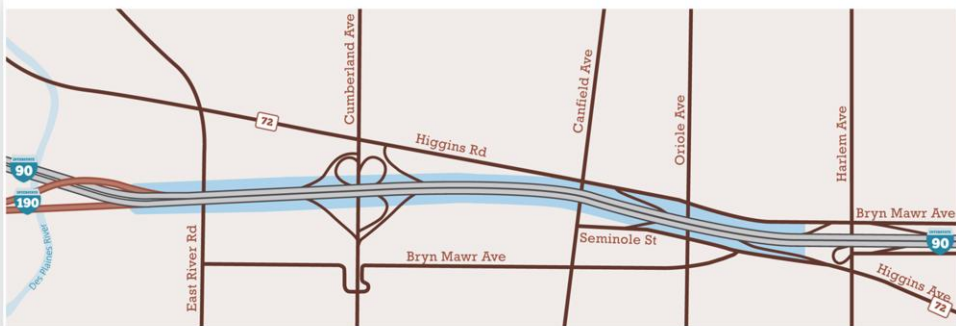
The proposed project is needed to address existing safety and traffic operations deficiencies. These transportation needs were identified through detailed technical analysis as well as stakeholder and public outreach activities.

After the first PWG meeting and discussion of the issues, concerns, goals, objectives and Problem Statement, the next step was to develop the Purpose and Need for the project. The Purpose and Need is important for the project since it defines why the project is warranted and worthwhile, as well as providing the basis for development of potential improvements and guidelines for evaluation. It is required as part of the NEPA process that we are following for this project, and is intended to provide a clear statement of the objectives that the project will achieve.

The Purpose & Need document was emailed to all of you for review and comment. The needs of the project are to improve safety deficiencies and improve traffic operations deficiencies. Let's take a closer look at the safety concerns and deficiencies.

As many of you have noted, noise impacts are not included in the Purpose & Need for the project. This is because the purpose and needs are driven by transportation problems that can be fixed by the project. The Phase I process is intended to result in a set of improvements that will fulfill the purpose and need while minimizing environmental impacts, such as noise. Therefore, we are required to complete a noise study, which is underway, but it is not a need that is driving the project.

Existing Conditions & Deficiencies



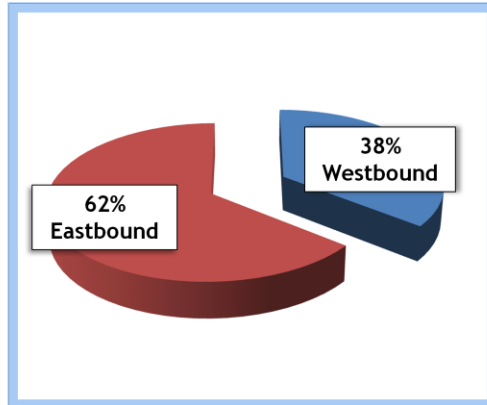
Existing I-90
I-190 to Cumberland Avenue



Existing I-90
Cumberland Avenue to Harlem Avenue

Review existing conditions

Crashes on I-90: 2007-2011



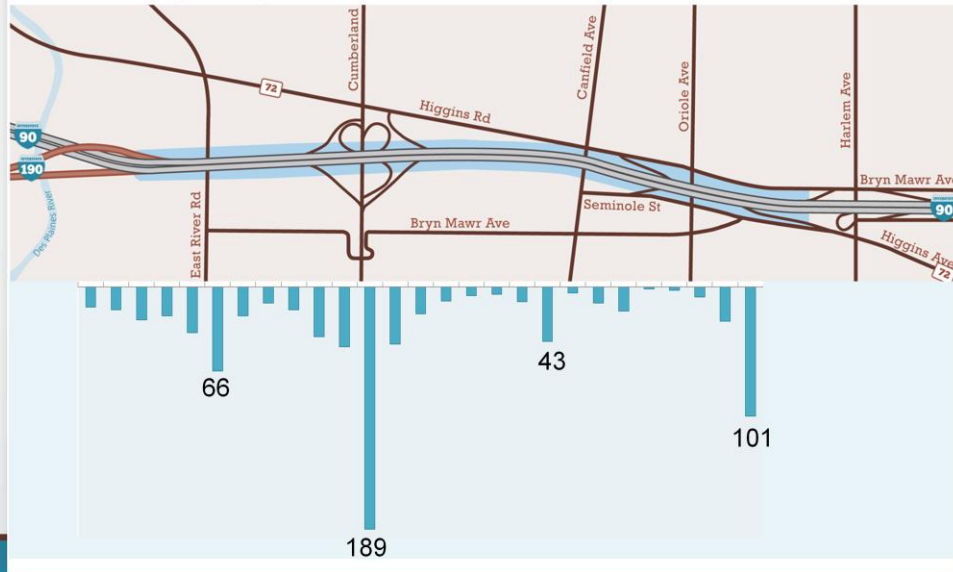
Total of **1,152** crashes in study area,
approximately
1 crash every 1.5 days

168 injuries
2 fatalities in project area
+ 1 fatality on I-90 just to the west of project limits

62% of crashes were **rear end** crashes
and **23%** were **sideswipe** crashes

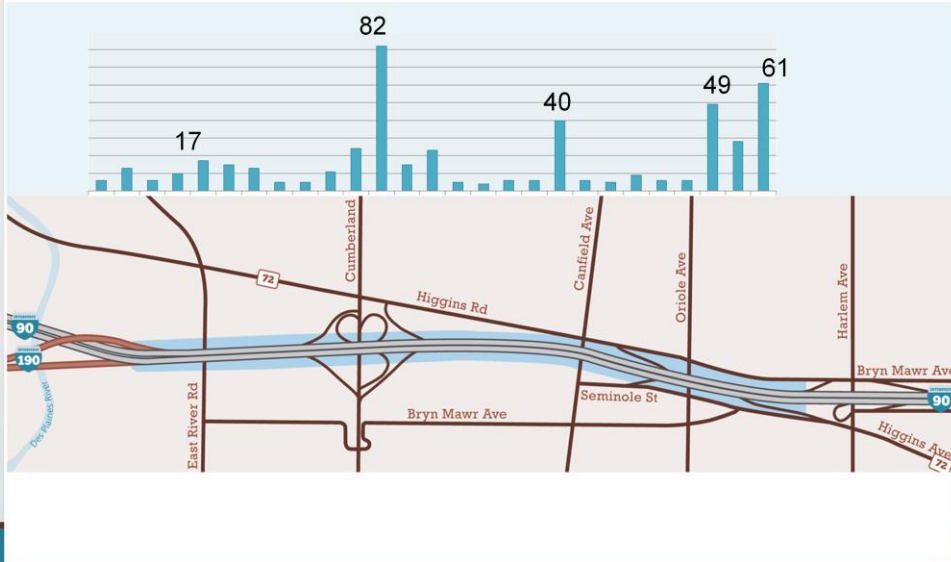
Since the last PWG meeting, we've analyzed an additional year of crash data (2011). From 2007 through 2011, a total of 1,152 crashes occurred in the project area. The majority of crashes occurred on the eastbound side of I-90. 62% of crashes in the project area were rear-end crashes, and another 23% were sideswipes, both of which are indicative of congested conditions and stop-and-go traffic. 168 injuries and 3 fatalities occurred over the 5 years analyzed.

Crash Frequency - Eastbound I-90



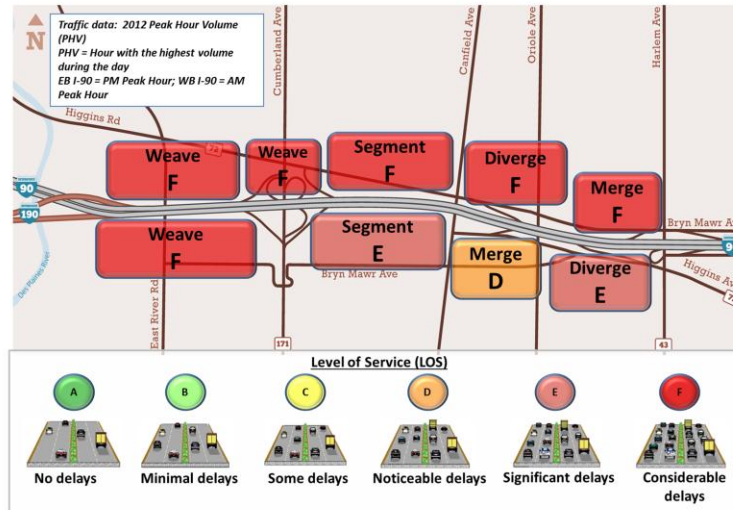
This graph shows the distribution of crashes that occurred on the EB side of I-90 in the project area. As you can see, there are many crashes clustered around the Cumberland Ave Interchange. This graph includes both injury crashes and property damage crashes.

Crash Frequency - Westbound I-90



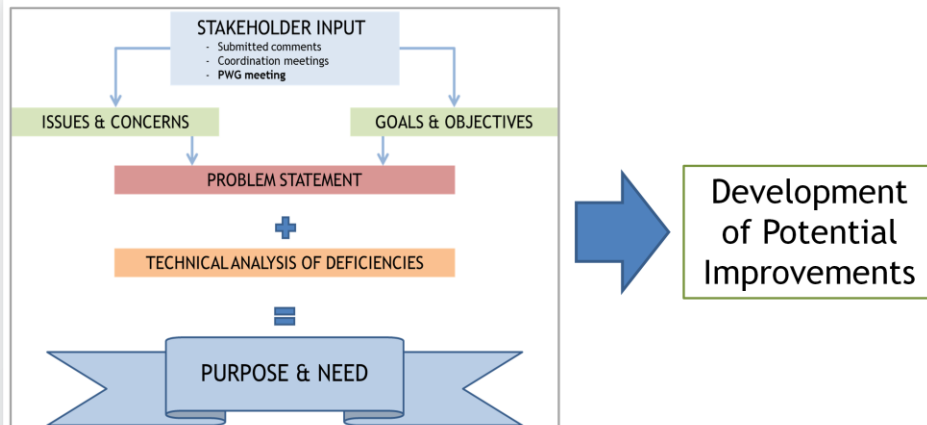
This graph shows the distribution of crashes on the westbound side of I-90. Again there is a concentration near the Cumberland Avenue interchange, although it is a lesser number than on the eastbound side. Again, the graph includes both injury crashes and property damage crashes.

Traffic Operations Deficiencies



The second need point is to improve traffic operations. Level of Service analyses show that the entire project area operates with noticeable to considerable delays during the peak hours. As several of you have noted, this analysis appears to mischaracterize the congestion on Eastbound I-90 – but in fact the congestion at the merge point between I-190 and I-90 is so severe that it effectively meters, or holds back traffic, which is why the sections to the east are showing slightly better levels of service. In addition the level of service model does not take into account downstream congestion (ie east of Harlem).

Project Development Process



With the safety and operational needs of the project identified, the project team started developing potential alternatives for improvement, which we will show you here today.

Build Alternative #1A (CD Road)

EASTBOUND:

- Connect to Cumberland Flyover (separate project)
- Barrier between I-90 and I-190 (CD Road)
 - from junction to east of Cumberland interchange
 - 2 lanes on I-90
 - 3 lanes on I-190
 - one lane drops at Cumberland SB exit ramp
- Additional lane on I-90
 - from east of Cumberland to Harlem exit ramp (4 lanes)
- Pavement cross-section and shoulders reduced at Cumberland CTA station
- Minor ramp terminal modifications

WESTBOUND:

- Additional lane on I-90
 - beginning at Harlem entrance ramp
 - 4 lanes total
- Westbound CD Road
 - for I-190 and Cumberland Avenue traffic
 - 3 lanes to I-90 and 3 lanes to I-190 at diverge point
- CTA Pedestrian Bridge not impacted
- Full shoulders provided along I-90 at Cumberland CTA Station
- Minor ramp terminal modifications

Highlight the changes that would be made to I-90 if Build Alt 1A (CD Road) is chosen

[have proposed improvements on plan sheet on the table – discuss points from the slide and point them out on the plan]

Build Alternative #2B (No CD Road)

EASTBOUND:

- Connect to Cumberland Flyover
 - separate project
- Barrier separated exit
 - Flyover and I-190 traffic
 - serving Cumberland SB exit only
 - I-90 EB to Cumberland NB exit ramp stays on I-90 to exit
- Additional lane on I-90
 - from Cumberland to Harlem
 - EB exit ramp
 - 4 lanes total
- No pavement restrictions at Cumberland CTA Station and parking garage
- Minor ramp terminal modifications

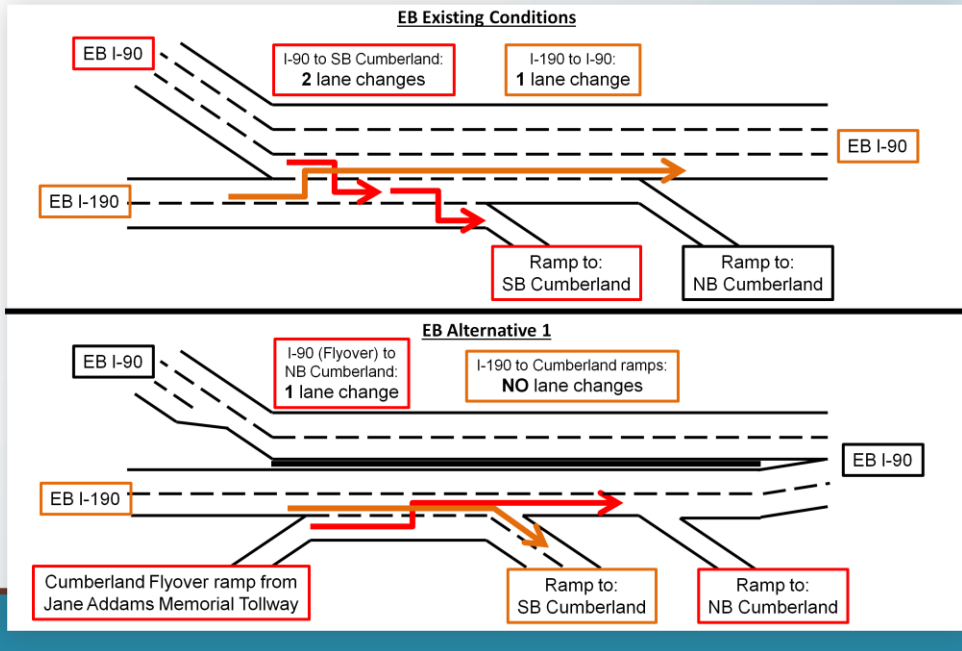
WESTBOUND:

- Additional lane on I-90
 - beginning at Harlem
 - WB entrance ramp
 - 4 lanes total
 - 3 lanes to I-90 and 3 lanes to I-190 at diverge point
- Minor ramp terminal modifications
- Impacts CTA pedestrian bridge at Cumberland CTA Station

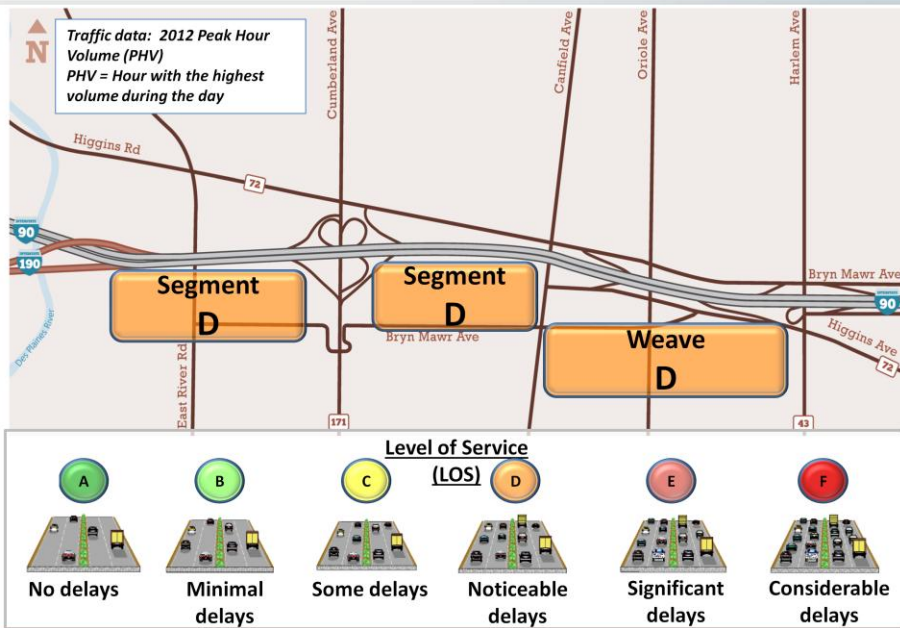
highlight the changes that would be made to I-90 if Build Alt 2B (No CD Road) is chosen

[have proposed improvements on plan sheet on the table – discuss points from the slide and point them out on the plan]

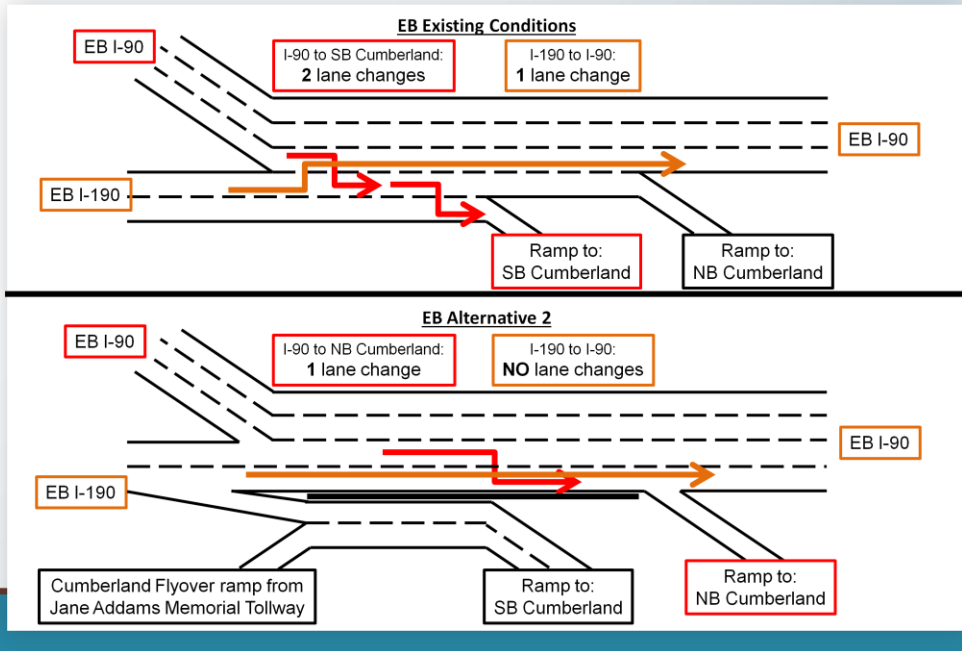
Need Element: Improve Traffic Operations



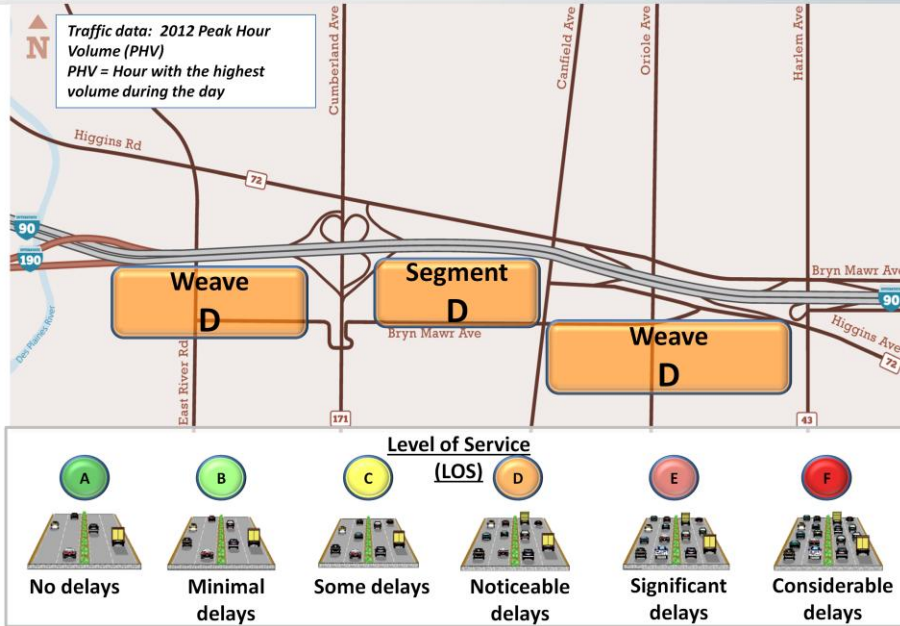
Traffic operations: EB Alternative 1



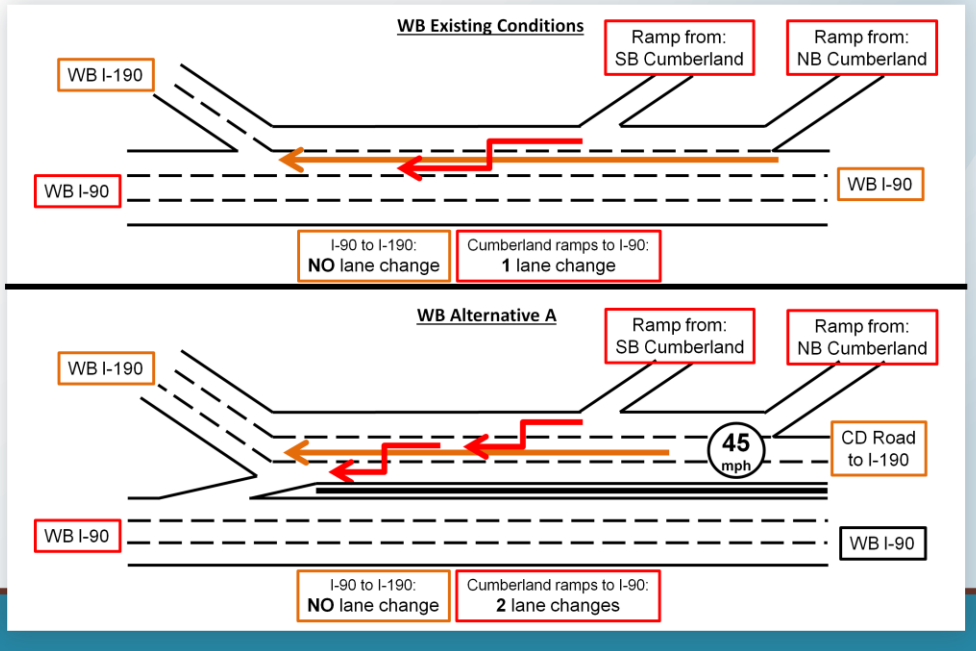
Need Element: Improve Traffic Operations



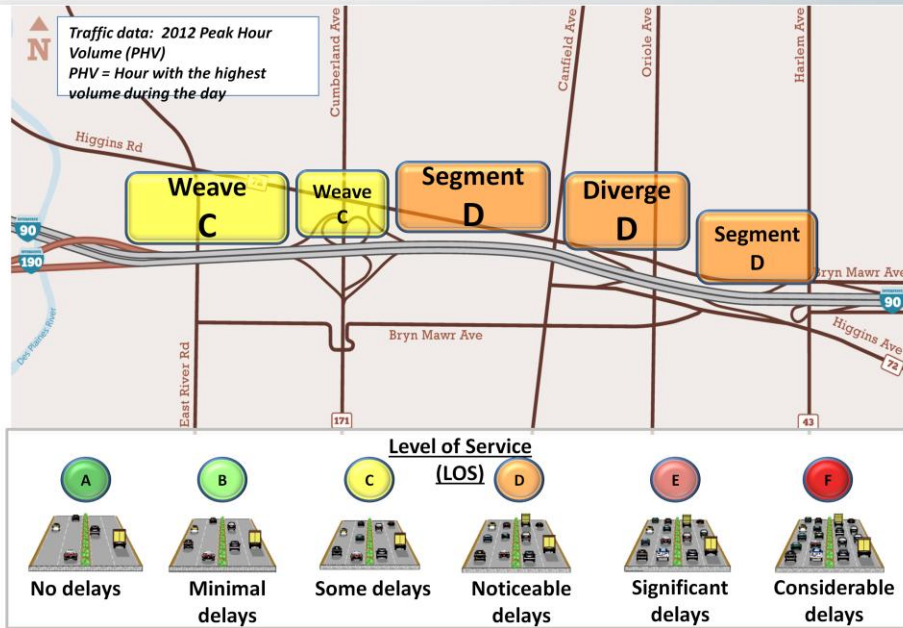
Traffic operations: EB Alternative 2



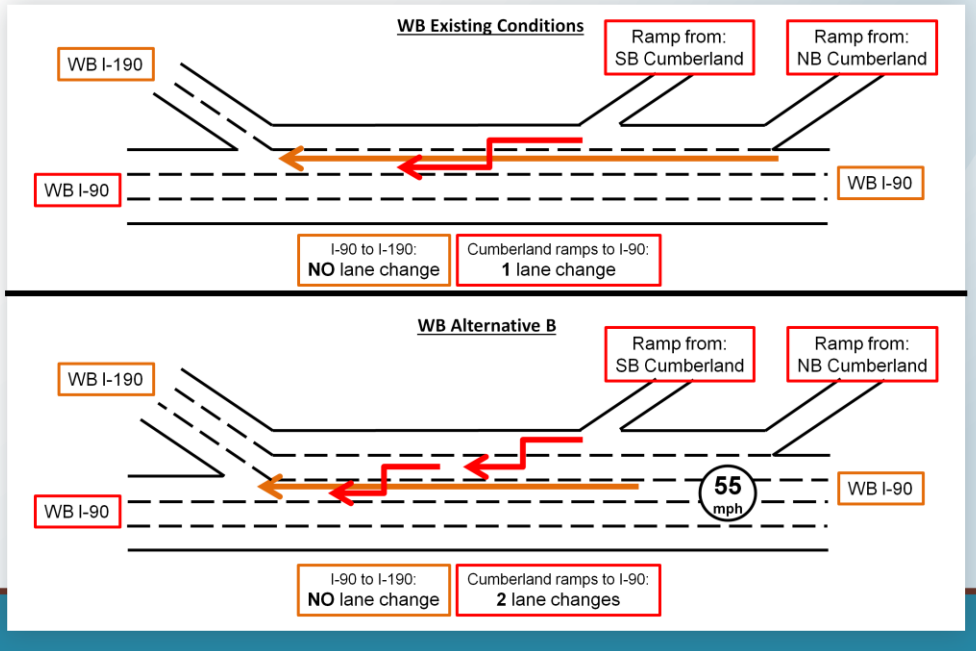
Need Element: Improve Traffic Operations



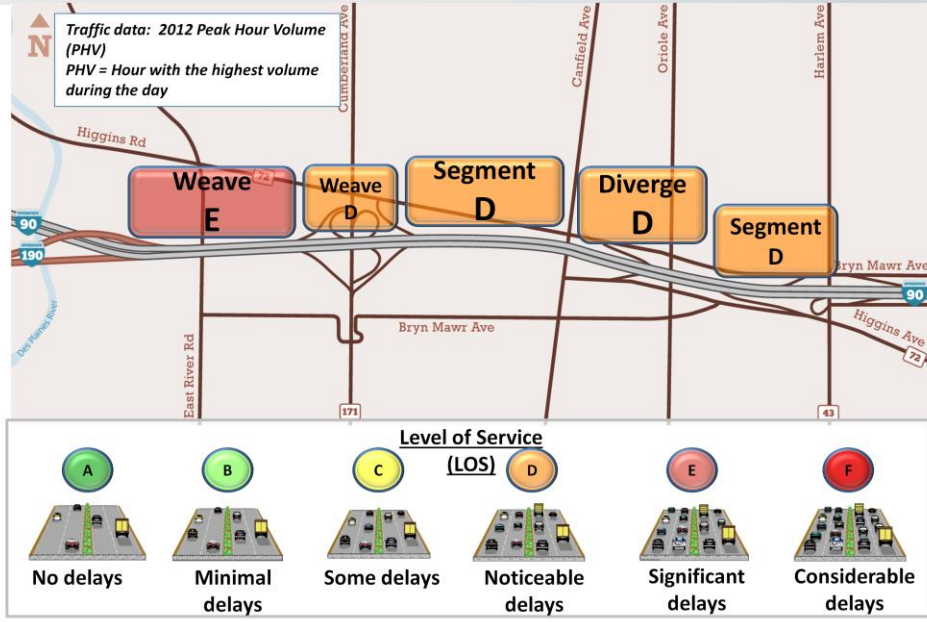
Traffic operations: WB Alternative A



Need Element: Improve Traffic Operations



Traffic operations: WB Alternative B



Proposed improvement summary

Interchange safety improvements

- I-190 interchange
 - Cumberland flyover ramp
 - Collector-Distributor Roadways
- Cumberland Avenue
 - Collector-Distributor Roadways
 - Extension of 4th lane east of interchange
- Harlem Avenue
 - Dedicated entrance and exit lanes

Earlier we showed the number of crashes that have historically occurred in the project area and how they are concentrated near interchanges.

The alternatives presented today propose to improve safety at the interchanges in the following ways:

Proposed improvement summary

System-wide improvements

- Crash reduction

- I-190 to Cumberland 40% to 82%
- Cumberland to Harlem 8% to 54%

- Traffic delay reduction

- Eastbound I-90 77% to 82%
- Westbound I-90 72% to 84%

To summarize the data that we've looked at today.....

Evaluate the project elements:

- I-90/ I-190 Merge
- Access to Cumberland Avenue exits
- I-90/ I-190 Diverge

Based on the following factors:

Purpose: To provide an improved transportation system along I-90

Needs: Improve safety and improve traffic operations

Potential

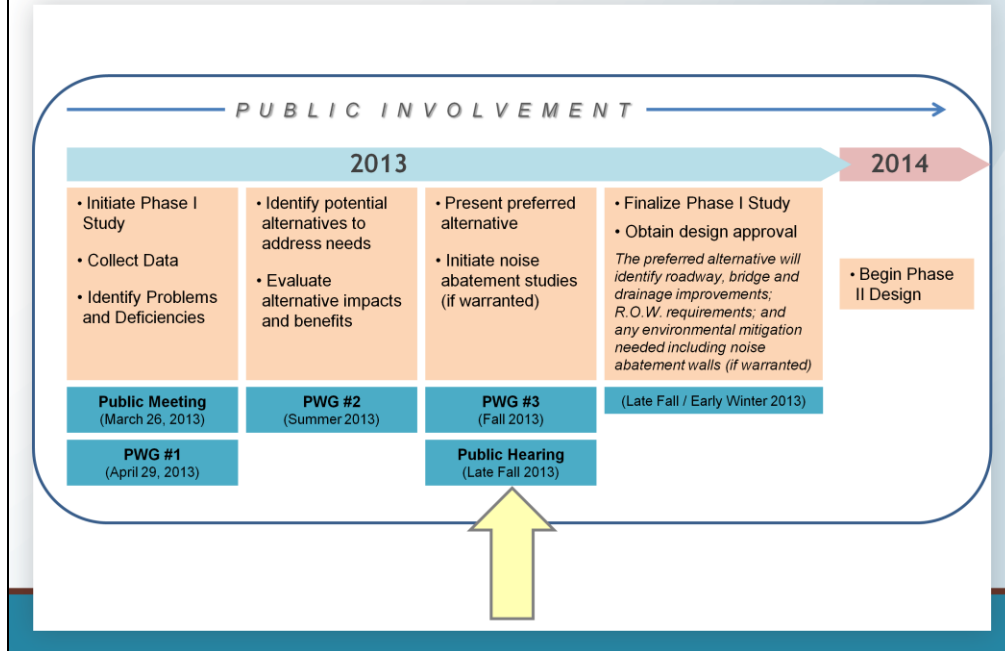
impacts:

- Air quality
- Noise
- Wetlands
- Drainage

Informal workshop – facilitate discussion about the pro’s and con’s of each alternative.

Team will write pro’s and con’s on flip chart.

Schedule and Next Steps



The next step of the project is to begin developing the preferred alternative for improvement. Using the evaluation of the two potential alternatives that we completed today, the project team will now start working on the preferred alternative. You'll preview the preferred alternative at the third PWG meeting later this year (just before the Public Hearing), and it will then be presented to the public at the Public Hearing.

**THANK YOU for
taking an active role
in the planning
process!**



Thank you again for taking an active role in the planning process!

If you have any additional questions or comments, please let us know.